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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,382

11/20/2003

Keiji Kuroda

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21553

7590

01/24/2006

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EXAMINER

FIGUEROA, FELIX O

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,382

Applicant(s)

KURODA ET AL.

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,8 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,8 and 12-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/2005 has been entered.

### ***Drawings***

The drawings are objected to because they have elements shown in cross section which are not properly crosshatched. Insulating members shown in cross section should be properly crosshatched. See for example Figures 16 and 17. It is brought to applicant's attention that the conventional crosshatch for insulating members shown in cross section consist of lines of two different thicknesses alternatively disposed.



Correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 13, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (US 6,565,389) in view of Pickles (US 6,663,407).

Igarashi discloses a combination including a receptacle connector and a plug connector substantially as claimed. Igarashi discloses substantially the claimed invention except for the plug width and depth fitting faces and the pair of latch arms.

Pickles teaches a receptacle connector body (1) including a pair of latch arms (16) extending outward in the depth direction from two locations that are spaced from each other in the width direction on the receptacle connector body and wherein the latch arms are adapted and constructed to undergo elastic deformation in the width direction; and each latch arm being provided with a retaining part (164) projecting inward in the width direction, and each said retaining part respectively including a guiding part (162) that generates a component force acting outward in the width direction so as to outwardly elastically deflect each latch arm respectively due to a pressing force acting on the guiding part toward the counterpart member in the thickness direction, a receptacle width fitting face (1642) facing inward in the width direction and adapted to cooperate with a mating member width fitting face (443) of the plug connector, and a receptacle depth fitting face (not labeled) facing inward in the depth direction and adapted to cooperate with the mating member depth fitting face (441/442) of the plug connector in order to provide a secure mechanical connection between the receptacle and the mating member. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the combination of Igarashi

with a pair of latch arms and cooperating fitting faces, as taught by Pickles, to provide a secure mechanical connection between the receptacle and the mating member.

Claims 4, 8, 15, 16 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi and Pickles, and further in view of Wu (US 6,565,383).

Igarashi, as modified by Pickles, discloses substantially the claimed invention except for the latch being metal and integral with the metallic cover. Wu teaches a receptacle (10) including a metallic cover (16) and latch arms integral with the metallic cover, thus simplifying the molding process of the receptacle and providing wearing resistant latch arms. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the latch arms integrally with the metallic cover, as taught by Wu, to simplify the molding process of the receptacle and provide wearing resistant latch arms.

Regarding claims 8 and 16, Igarashi, as modified by Pickles, discloses the plug connector comprising an insulating plate-shaped plug connector body (front of Igarashi's plug) that has the shape substantially a rectangle, the contact having conductivity and being provided on the plug connector body, the contact comprising a contacting part being exposed at the inward edge in the depth direction of the plug connector body at least on one face thereof in the thickness direction and a connecting part connected to the electric wire or the flat type flexible cable, and the plug width fitting face and the plug depth fitting face being provided on the plug connector body at the two locations spaced from each other in the width direction thereof (as shown/taught by Pickles).

Claims 12, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi and Pickles, and further in view of Kajinuma (US 6,361,358).

Igarashi, as modified by Pickles, discloses substantially the claimed invention except for the concaved parts being at corners of the plug connector. Kajinuma teaches a plug connector having the concave parts (between 164,156) at corners of the plug connector in order to provide a small profile plug connector and maximize space usage. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a plug connector of Igarashi having the concave parts at corners of the plug connector, as taught by Kajinuma, to provide a small profile plug connector and maximize space usage.

Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi, Pickles and Wu, and further in view of Kajinuma.

Igarashi, as modified by Pickles, discloses substantially the claimed invention except for the concaved parts being at corners of the plug connector. Kajinuma teaches a plug connector having the concave parts (between 164,156) at corners of the plug connector in order to provide a small profile plug connector and maximize space usage. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a plug connector of Igarashi having the concave parts at corners of the plug connector, as taught by Kajinuma, to provide a small profile plug connector and maximize space usage.

***Response to Arguments***

Applicant's arguments filed 11/18/2005 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It is noted that it is not the fact that the prior art (in this case, the Igarashi) does not state / recite any specific need for a latching structure, does not prevent one of ordinary skill in the art from improving upon such prior art (i.e. adding a latching structure to provide a secure mechanical connection).

In response to applicant's argument that the latch structure of Pickles only relates to circuit cards, please note that it has been held that in order to be relied upon as a basis for rejection of the claimed invention, a prior art reference must be reasonably pertinent to the particular problem with which the applicant was concerned. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Pickles discloses the use of a latching mechanism in order to provide a secure mechanical connection between mating electrical members.

In response to applicant's argument that Igarashi does not disclose a latch structure and that Pickles only relates to circuit cards, please note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed

invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to Applicant's arguments that Pickles does not disclose laterally deflectable arms, please note that the rejection defines the supporting arms as elements 16, and not 14 as argued by the Applicant.

In response to Applicant's arguments that Pickles requires the arms to be integrally molded of plastic, please note that the fact that Pickles discloses the arms integrally molded of plastic does not mean that it is required, but merely shows an example of an embodiment of the invention. Please note that Figures 7 and 8 of Pickles show arms that are not integrally molded of plastic.

In response to Applicant's arguments (regarding claim 22) that against the references individually, please note that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to Applicant's arguments regarding claim 24, please note that Figures 7 and 8 of Pickles show arms that are not integrally molded of plastic.

In response to Applicant's arguments that Kajinuma does not disclose "an insulating plug connector having concave part at the corners of the plug connector", please note that Igarashi (and Pickles and Wu) teaches an insulating plug connector body. Please note that the test for obviousness is not whether the features of a



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secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Kajinuma teaches the use of concave part at the corners of the plug connector.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. . For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Felix O. Figueroa  
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